

Appl. No. 10/662,153
Amdt. dated _____
Reply to Office action of Dec. 11, 2004

REMARKS/ARGUMENTS

Please enter the enclosed Information Disclosure Statement separate from the specification with missing reference as supported in the specification.

The Examiner has objected to the drawings under 37 CFR 1.83(a) as not showing every feature of the invention specified in the claims, see page 3 of the action. The issue identified by the Examiner is referred to as the "light transmission baffles" indicating that as set forth in the claims, as filed, was not shown in the drawings.

It is respectfully submitted that the drawings do not need to be corrected since applicant has amended the claims as noted above to more properly define the nature of the baffles claimed within the convection cooled projector invention of the application.

It should be noted that it was merely a question of interpretation concerning the inappropriate use of the words "light transmission baffles" in the claims since, in essence, if one is to review the specification, it is clear that the baffles as the Examiner indicated are opaque and therefore block the transmission of light which is what applicant is referring to in the claim language, however, since that language is confusing, the claims have been amended to simply refer to as "light baffles" which is more appropriate and more consistent with common usage.

The Examiner has objected to the specification under 37 CFR 1.75(d)(1) and MPEP 608.01(o), see page 4 of the action, number 5 concerning again the issue of light transmission baffles as not appearing in the specification.

As noted, the claims have been amended to overcome the confusion, the comments noted above are pertinent to subsection also.

The Examiner has objected to claims 5 and 10 for informalities, see item 6, page 4 concerning the use of the phraseology "low wattage light bulb".

Since the specification does not support specific wattage, only the general term "low wattage" it was used in conjunction with common knowledge and prior art concerning the typical wattage of light bulbs used in projector systems for LCD panel projection systems.

It is commonly known that such wattage has to be sufficiently high in order to generate the light required and accordingly such high wattage light bulbs typically give off great amounts of heat in which the prior art typically requires the use a cooling fan which applicant's invention addresses by claiming the convection cooled projector.

Applicant has amended the claims to overcome the objection.

The Examiner has rejected claims 1-7 as pending in the application under 35 U.S.C. 112 as failing to comply with enabling requirement referring again to the now considered inappropriate use of the terminology "light transmission baffles" which was discussed previously and set forth in the claims, however, it is respectfully submitted that the specification apart from the claim always refers to the

baffles as being "light baffles" 27-30 which is well within the compliance of common use language, as noted.

The Examiner has rejected claim 6 separately under 35 U.S.C. 112 again concerning the issue of transmission baffles, the comments set forth previously above address those issues.

Additionally, the Examiner indicated that if claim 6 was rewritten in independent form including all of the limitations of the base claims, it would be distinguishable over the prior art.

In essence, applicant has rewritten claim 6 by including the limitations set forth therein into original claim 1 as extensively amended thus introducing the limitation concerning the baffles now extending from "respective surfaces of effacing isolation walls and said base, liquid crystal panel support and said lens effacing surfaces, said light baffles in vertical alignment with each other in adjacent cooling compartments of said housing".

The Examiner has rejected claims 1-5 and 8-12 as originally pending in the application after election under 35 U.S.C. 102(b) as being anticipated by Futakami et al (U.S. 5,842,761) beginning on page 6 of the action, item 9.

While the reference does have a housing, light source, upstanding walls and ventilation features, see 502 and 501, it doesn't and the Examiner concedes in reference to claim 6 a plurality of baffles extending from claim 1 as now amended the "respective surfaces of effacing isolation walls" and as claim 1 amended introduces the limitation wherein the thermal isolation walls define "a plurality of aligned independent coin compartments defined by said thermal isolation walls" in

which as noted a plurality of baffles are positioned along with associate respective ventilation openings.

It is clear that the reference while showing at best two compartments independent of the enclosure itself, only one of said compartments has ventilations means associated with it and neither one of the compartments have a plurality of “baffles defining spaced overlapping elements extending from respective surfaces of effacing isolation walls” which define the cooling compartments as now claimed.

The Examiner’s comments under this rejection regarding claims 2 and 3 are noted. Claims 2 and 3 which depend from claim 1 which has been rewritten in independent form including the limitations of claim 6, therefore are believed to be patentably distinct over the reasons the Examiner has cited as supported by the reference.

Concerning claim 4, claim 4 has been canceled with those limitations concerning rewritten amended claim 1.

In regards to applicant’s claim 5, again it depends from claim 1 as outlined above.

With regards to claims 8, 9, 11 and 12, see page 8 and claim 10 on page 9, those claims have been cancelled without prejudice.

The Examiner has rejected claims 7 and 13 under 35 U.S.C. 103(a) as being unpatentable over the Futakami reference as applied to claims 1-5 and 8-12 as originally pending and further in view of new reference Eckhardt (U.S. 6,104,536).

Claim 7 is directed towards the Frenel type lens and the Examiner has cited Futakami to show that Frenel lenses are well known and used within the art.

Applicant acknowledges same, but believes claim 7 is allowable as a dependent claim from claim 1 as now amended which as noted is believed to be distinctive over that of prior art.

The Examiner also indicates originally that even though Futakami (U.S. 5,842,761) uses a fan, convection is still used to cool the optical components, see page 6, item 9.

It is respectfully submitted that Futakami does not and cannot rely on convection cooling for any parts of components within the housing since the reference always requires utilization of a temperature detector 180, see column 7, lines 19-21 and an airflow created by the fan 400, see column 8, lines 6-10 and refer specifically to the generation of heat reaching a high temperature wherein air is forced through the ventilation hole 501 provided in the first frame structure 500 by means of a fan thus providing air cooling for the second frame structure 100 and also providing direct air cooling of the heat absorbing filter 102, illumination lamp and reflector from the ventilation hole in the second frame 100, see column 7, lines 60-67, etc.

It is respectfully submitted that as is typical and well known within the industry, really high wattage lamps are typically used and because of the nature of such structures, excess heat is developed and there is always a cooling fan associated with those projectors. It is therefore not reasonable to make an assumption that such projection systems rely on convection cooling when they all have fans associated therewith.

Given the nature of the amended claims and the claims now remaining for consideration, it is sincerely believed that the claims as now amended overcome the rejections under 35 U.S.C. 102 and 35 U.S.C. 103 as well as the various objections under 112, etc. as addressed earlier and therefore the claims as currently amended in the application are in condition for allowance and the same is respectfully requested.

Respectfully submitted,

By


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